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CLAIMS

1. A method in a computer system for displaying gridlines on a display, comprising:
 - identifying objects previously placed on the display within bands above, below, and to the sides of an object selected to be dragged into a location on the display;
 - determining the placement of a first and a second gridline relative to the identified objects; and
 - displaying at least one of the gridlines when the selected object is proximate to the at least one gridline.
2. The method of claim 1 wherein the identifying, determining, and displaying only take place while the object selected to be dragged is actually being dragged.
3. The method of claim 1 wherein a maximum of one horizontal gridline and one vertical gridline are displayed to the user.
4. The method of claim 1 wherein the drawing program includes a snap feature that positions the object selected to be dragged when proximate to the displayed at least one gridline.
5. The method of claim 1 wherein the gridlines indicate where the object selected to be dragged would be located in the drawing if the selected object maintained the same spacing as the other objects in the drawing.
6. The method of claim 1 wherein the gridlines are temporarily stored in a list of dynamic gridlines.

7. The method of claim 6 wherein the drawing program adds entries to the list using a "most recently used" algorithm.
8. The method of claim 1 wherein the placement of the gridlines is determined by a maximum of two objects in each band of the selected object.
9. A method in a computer system for assisting the augmentation of a drawing program comprising:
 - determining a likely destination of a user-placed shape based on the present location of shapes already in the drawing; and
 - indicating to a user of the drawing program the determined destination.
10. The method of claim 9 wherein indicating the determined destination comprises:
 - establishing dynamic gridlines for the drawing; and
 - displaying the dynamic gridlines to the user.
11. The method of claim 10 wherein a maximum of one horizontal gridline and one vertical gridline are displayed to the user.
12. The method of claim 10 wherein the drawing program includes a snap feature that positions the user-placed shape when it is proximate to the displayed gridlines.
13. The method of claim 10 wherein the dynamic gridlines indicate where the user-placed shape would be located if it maintained the same spacing as the other objects in the drawing.
14. The method of claim 10 wherein the dynamic gridlines are temporarily stored in a list of dynamic gridlines.

15. The method of claim 14 wherein the drawing program adds entries to the list using a "most recently used" algorithm.

16. A method in a computer system to dynamically display a temporary gridline in a drawing, the method comprising:

while a selected object is being dragged in the drawing, searching the drawing for a nearest placed object in bands located above, below, and to each side of the selected object;

determining locations for a first and a second temporary gridline relative to the placed object in each direction by calculating a distance between the placed object in each direction and inferring the location of the first and second gridlines by adding a distance based on the thickness of the placed object to a default avenue distance between the placed object and the selected object; and

displaying whichever of the first or second temporary gridlines is closest to the selected object in at least one direction from the selected object.

17. The method of claim 16 wherein static gridlines are also displayed in the drawing.

18. The method of claim 16 wherein the computer system automatically places the selected object aligned to the displayed one of the temporary gridlines when the selected object is near to the displayed gridline.

19. The method of claim 16 further including:

determining a location for an along temporary gridline that runs through the center of one of the placed objects and runs parallel to a particular band.

20. The method of claim 19 further including:

displaying the along temporary gridline when the selected object is closer to the along temporary gridline than any other gridline and when the selected object is proximal to the along temporary gridline.

21. The method of claim 16 wherein the location of the gridlines is entered into a list of gridlines.

22. The method of claim 21 wherein the entries into the list of gridlines are stored using a most recently used algorithm.

23. The method of claim 21 wherein the list of gridlines stores 16 entries.

24. The method of claim 16 wherein a maximum of one gridline that is horizontal in the drawing and one gridline that is vertical in the drawing is displayed.

25. A method in a computer system to dynamically display temporary gridlines in a drawing, the method comprising:

while a selected object is being dragged in the drawing, searching the drawing for a nearest placed object in bands located above, below, and to each side of the selected object;

determining locations for a first and a second across temporary gridline relative to the placed object in each direction by calculating a distance between the placed object in each direction and inferring the location of the first and second gridlines by adding a distance based on the height of the placed object to a default avenue distance between the placed object and the selected object; and

determining a location for an along temporary gridline that bisects the selected object and that runs parallel to the band being searched.

26. The method of claim 25 further including storing the determined locations in a list.
27. The method of claim 26 wherein the entries into the list are stored using a most recently used algorithm.
28. The method of claim 26 wherein the list of gridlines stores 16 entries.
29. The method of claim 25 further including:
displaying the closest gridline that is horizontal in the drawing and the closest gridline that is vertical in the drawing, provided the closest gridlines are proximately located to the selected object.
30. The method of claim 29 wherein to be proximately located to the selected object, the closest gridlines are within a display tolerance of the selected object.
31. The method of claim 30 wherein the display tolerance is 25 pixels.
32. The method of claim 25 wherein static gridlines are also displayed in the drawing.
33. The method of claim 29 wherein the computer system automatically places the selected object aligned to the displayed one of the temporary gridlines when the selected object is near to the displayed gridline.
34. The method of claim 26 wherein the entries into the list of gridlines are stored using a most recently used algorithm.
35. The method of claim 25 wherein a maximum of one gridline that is horizontal in the drawing and one gridline that is vertical in the drawing is displayed.

36. A computer-readable medium whose contents cause a computer system to display gridlines on a display by:

identifying objects previously placed on the display within bands above, below, and to the sides of an object selected to be dragged into a location on the display;

determining the placement of a first and a second gridline relative to the identified objects; and

displaying at least one of the gridlines when the selected object is proximate to the at least one gridline.

37. The computer-readable medium of claim 36 wherein the contents of the computer-readable medium cause the computer to identify, determine, and display only while the object selected to be dragged is actually being dragged.

38. The computer-readable medium of claim 36 wherein the contents of the computer-readable medium cause the computer to position the object selected to be dragged when proximate to the displayed gridlines.

39. The computer-readable medium of claim 36 wherein the contents of the computer-readable medium cause the computer to temporarily store the gridlines in a list of dynamic gridlines.

40. A computer-readable medium whose contents cause a computer system to assist the augmentation of a drawing program by:

determining a likely destination of a user-placed shape based on the present location of shapes already in the drawing; and

indicating to a user of the drawing program the determined destination.

41. The computer-readable medium of claim 40 wherein the contents of the computer-readable medium cause the computer to:

establishing dynamic gridlines for the drawing; and

displaying the dynamic gridlines to the user.

42. A computer-readable medium whose contents cause a computer system to establish temporary gridlines in a drawing by:

while a selected object is being dragged in the drawing, searching the drawing for a nearest placed object in bands located above, below, and to each side of the selected object;

determining locations for a first and a second across temporary gridline relative to the placed object in each direction by calculating a distance between the placed object in each direction and inferring the location of the first and second gridlines by adding a distance based on the height of the placed object to a default avenue distance between the placed object and the selected object; and

determining a location for an along temporary gridline that bisects the selected object and that runs parallel to the band being searched.

43. The computer-readable medium of claim 42 wherein the contents of the computer-readable medium cause the computer to store locations of the gridlines in a list using a most recently used algorithm.

44. The computer-readable medium of claim 42 wherein the contents of the computer-readable medium further cause the computer to:

displaying the closest gridline that is horizontal in the drawing and the closest gridline that is vertical in the drawing, provided the closest gridlines are proximately located to the selected object.

45. The computer-readable medium of claim 42 wherein the contents of the computer-readable medium cause the computer to further automatically place the selected object aligned to the displayed one of the temporary gridlines when the selected object is near to the displayed gridline.

46. A device for displaying calculated gridlines comprising:
a memory structured to store locations of objects placed on a drawing;
a grid calculator that determines a line likely to have a newly selected object aligned to it, based on the location of the objects already placed on the screen and based on the present location of the newly selected object; and
a display that shows the drawing and the line.
47. A computer system that displays gridlines on a display, comprising:
an object identifier structured to identify objects previously placed on the display within bands above, below, and to the sides of an object selected to be dragged into a location on the display;
a gridline generator structured to determine the placement of a first and a second gridline relative to the identified objects; and
a display structured to show at least one of the gridlines when the selected object is proximate to the at least one gridline.